

FIGURE 1

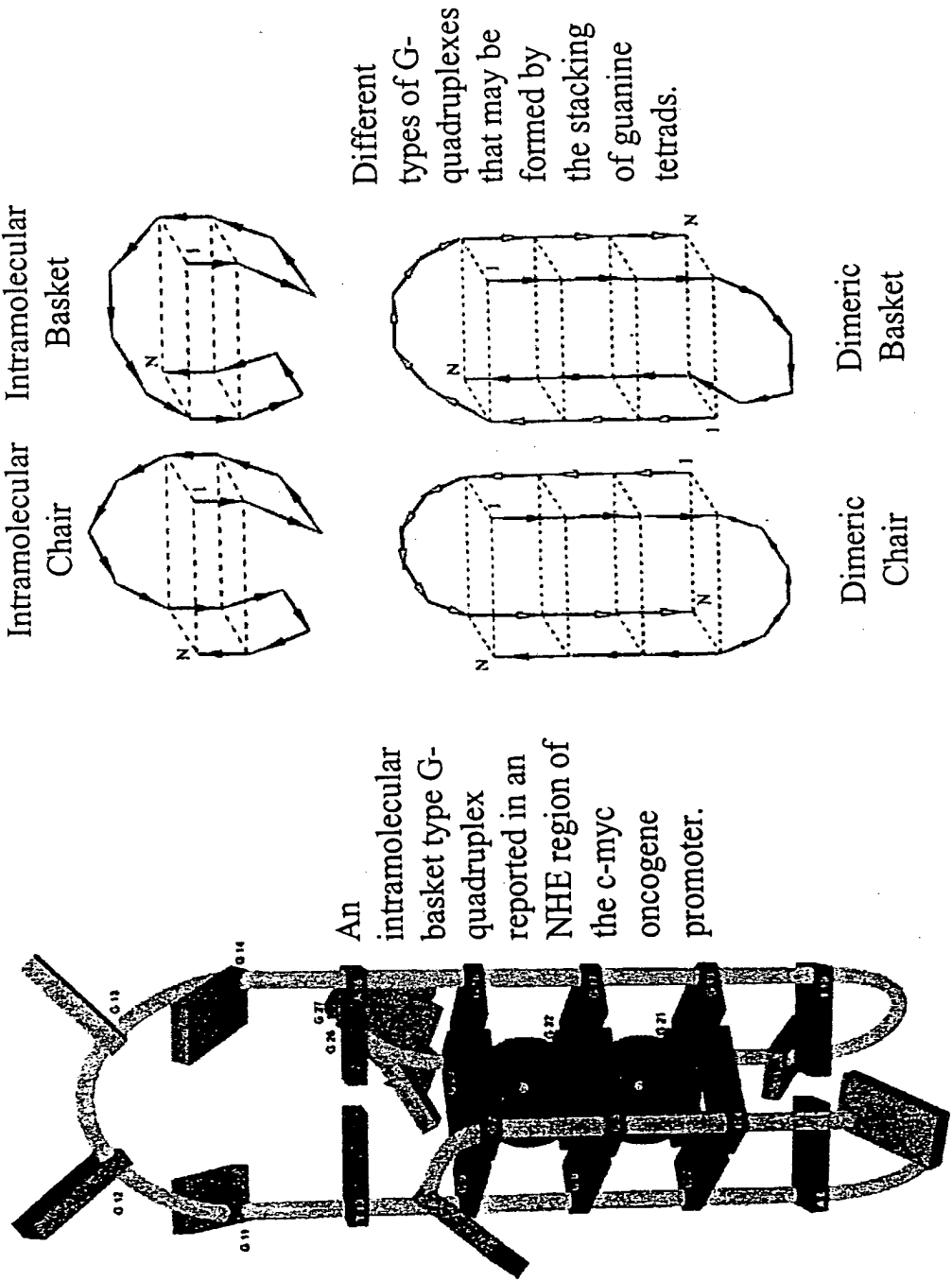


FIGURE 2A

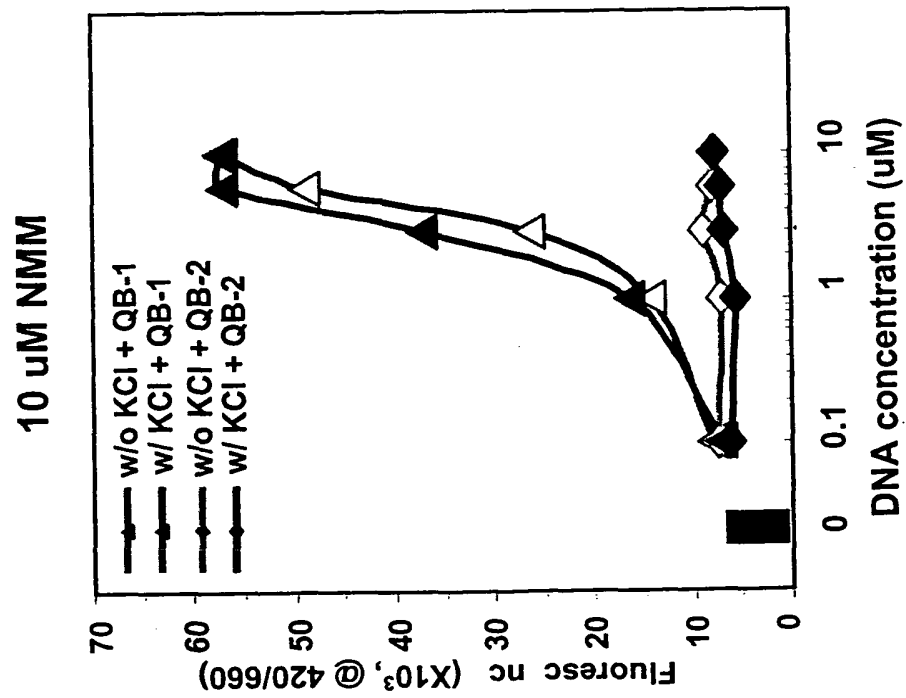


FIGURE 2B

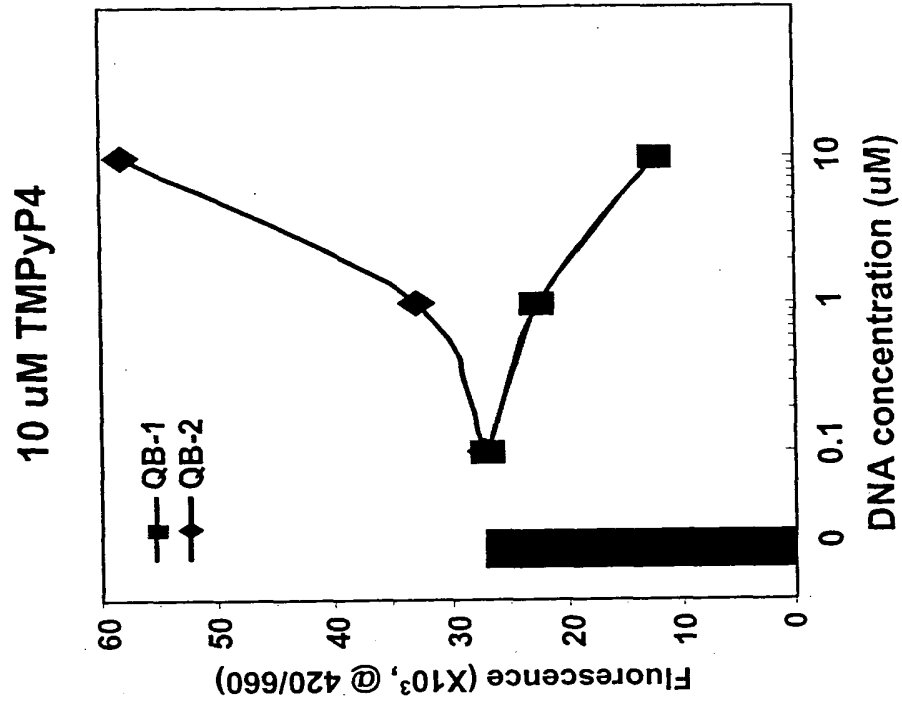


FIGURE 2D

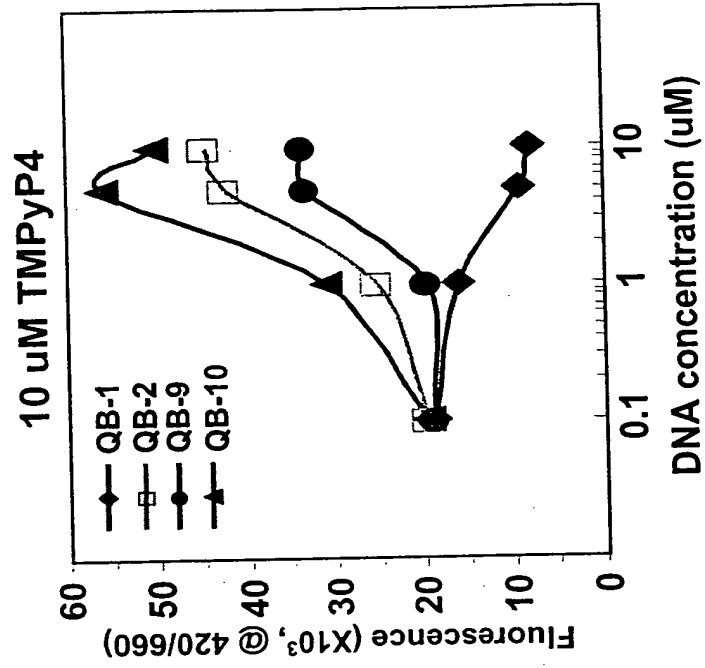
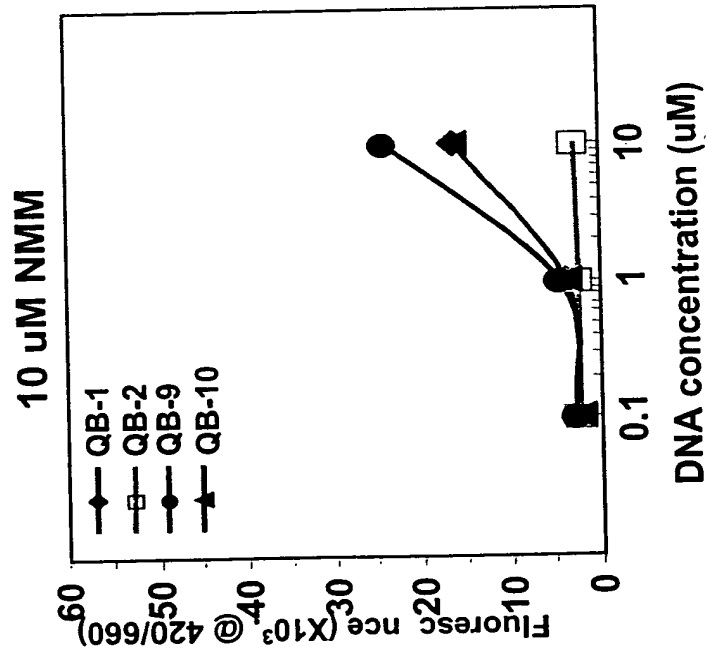


FIGURE 2C



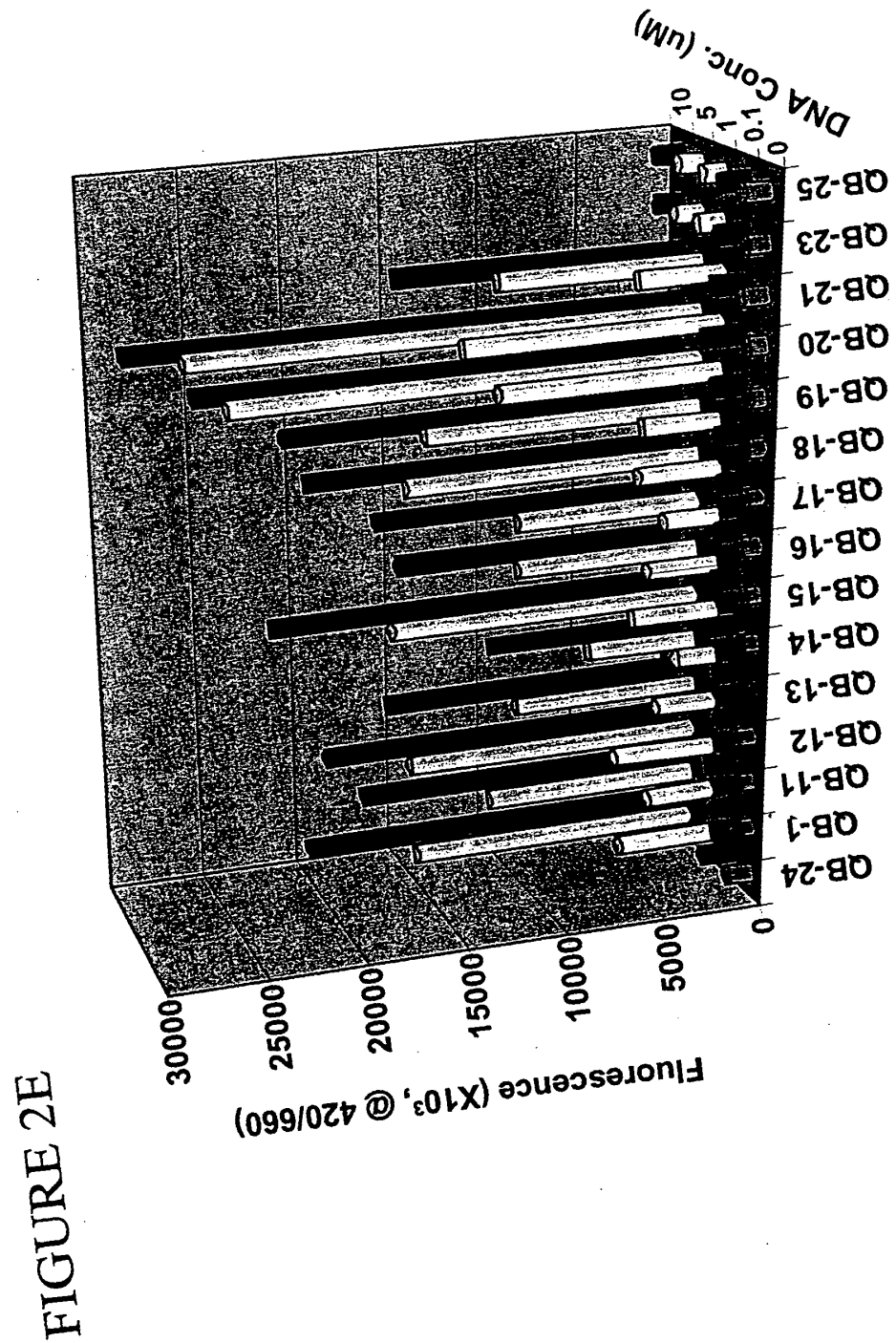


FIGURE 3

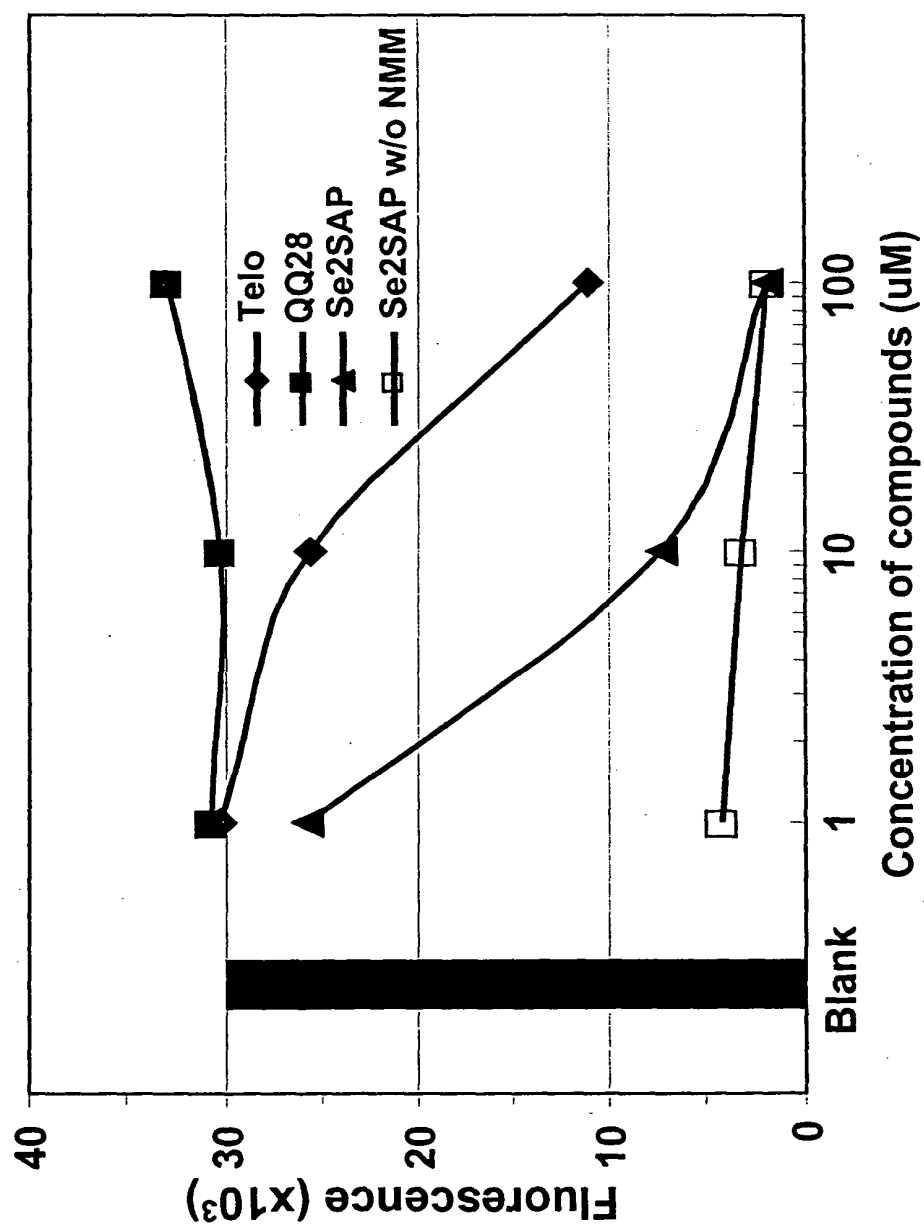


FIGURE 4A

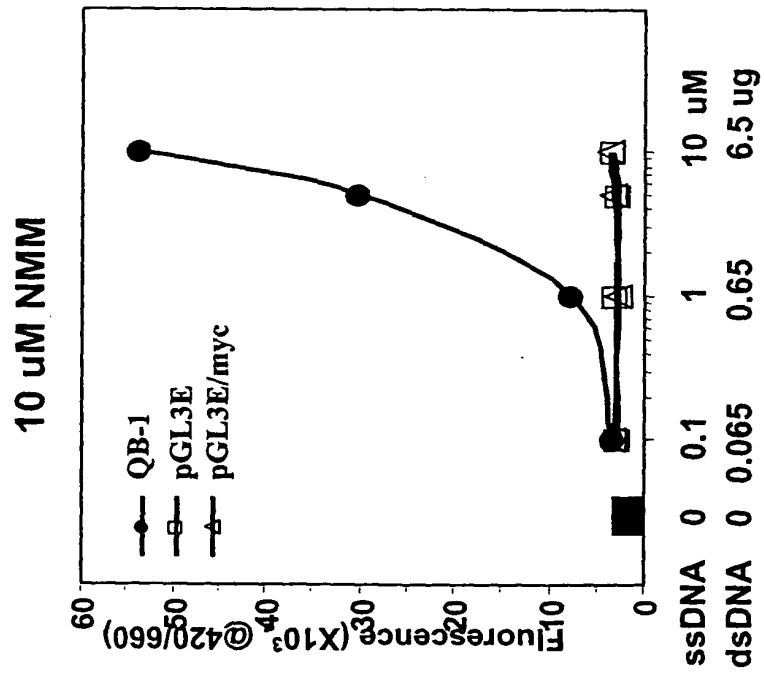


FIGURE 4B

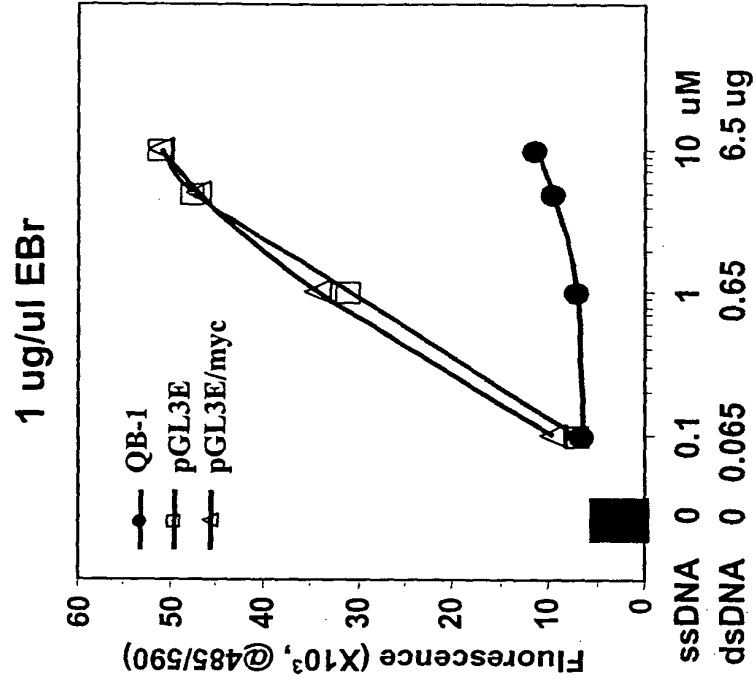
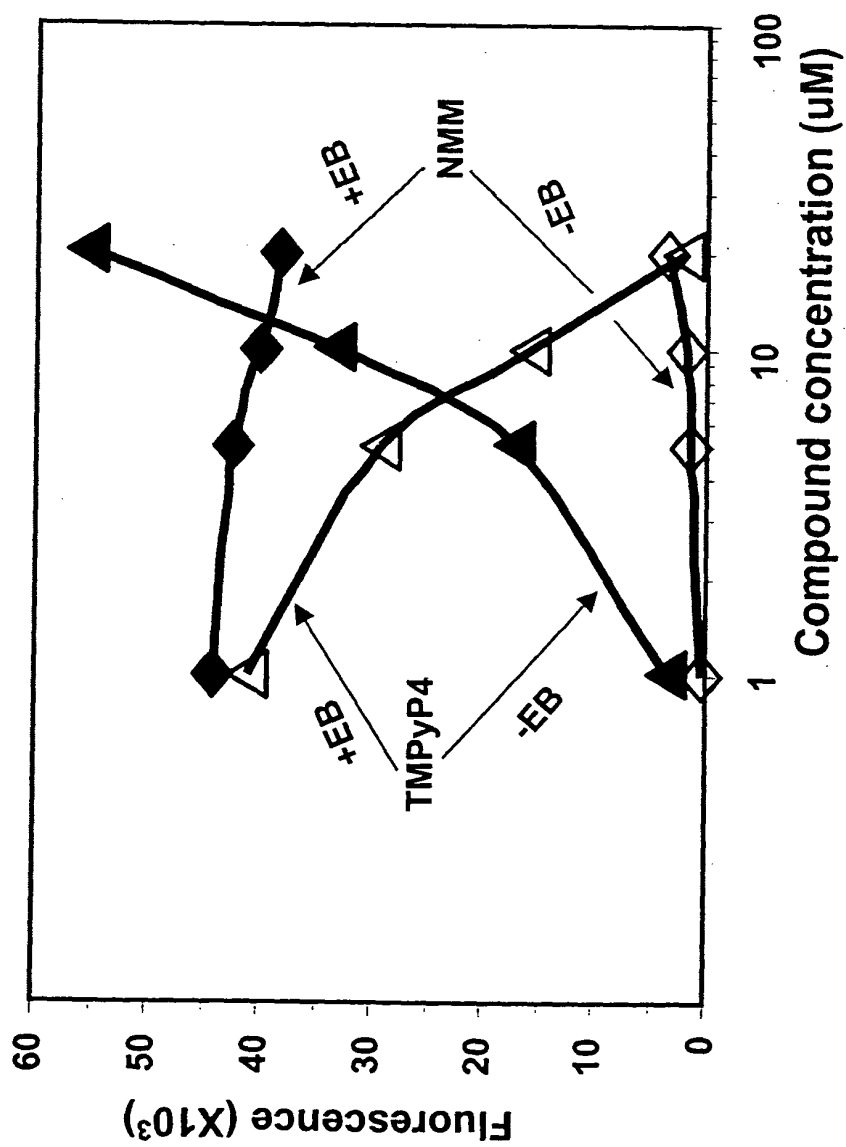


FIGURE 4C



The diagram illustrates the phage display cycle, a process for selecting and amplifying specific peptides from a library. The cycle consists of the following steps:

- combinatorial peptide library**: The starting point, represented by a large container holding many phages with different surface proteins.
- binding**: The library is exposed to an **immobilized target** (a surface with specific binding sites). Phages whose surface proteins bind to the target are retained.
- washing**: Unbound phages are removed, leaving only the bound phages on the target surface.
- elution**: The bound phages are released from the target surface.
- amplification**: The eluted phages are grown in a new medium to produce a second generation of the library.
- plating**: The amplified phages are plated on a solid medium to isolate individual clones.
- amplification of individual clones**: Selected clones are grown separately to test for specific binding properties.
- Test for binding of isolated clones**: The isolated clones are tested to confirm their binding specificity.
- Sequence DNA insert and deduce sequence of displayed peptide**: The DNA sequence of the selected phages is determined to identify the specific peptide being displayed.

